

[METHOD OF AVOIDING DIELECTRIC LAYER DETERIOATION WITH A LOW DIELECTRIC CONSTANT DURING A STRIPPING PROCESS]

Abstract of Disclosure

A low k dielectric layer is formed on a surface of a substrate of a semiconductor wafer. Then, a surface treatment is performed to the low k dielectric layer to form a passivation layer on a surface of the low k dielectric layer. A patterned photoresist layer is formed over the surface of the semiconductor wafer. The patterned photoresist layer is then used as a hard mask to perform an etching process on the low k dielectric layer. Finally, a stripping process is performed to remove the patterned photoresist layer. The passivation layer is used to prevent deterioration of the dielectric characteristic of the low k dielectric layer during the stripping process.

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